



Annual Drinking Water Quality Report for 2012
City of White Plains
255 Main Street
White Plains, New York 10601
(Public Water Supply ID #5903464)

Introduction

To comply with State regulations, the City of White Plains (“City”) annually issues a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system had no maximum contaminant level violations last year. Last year, we conducted tests for over 170 contaminants. Although 35 of those contaminants were at the detectable level, none of those contaminants were above the state’s allowable levels. This report provides an overview of last year’s water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Joseph J. Nicoletti, Jr., P.E., Commissioner at 914-422-1220. We want you to be informed about your drinking water.

Where does our water come from?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The state Health Departments and the FDA’s regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Source

One hundred percent (100%) of the water delivered by the City of White Plains is purchased from The New York City Department of Environmental Protection through Westchester County Water District No. 1. The raw water purchased from New York City (NYC) is drawn from the Kensico Reservoir, which is an unfiltered surface water source. Kensico Reservoir delivers a high quality water and has sufficient capacity to supply the City. The City’s three wells, which supply a total of approximately 150,000 to 200,000 gallons per day, were removed from service in 2009. The Federal EPA had previously enacted the Surface Water Treatment Rule (SWTR), which required us to conduct a study to determine if these wells were under the influence of nearby surface water and that was found to be the case with our wells. Although the water quality from these wells has been consistently high for many decades, the new regulations (stated under NYSDOH PWS 43 Technical Reference) now require us to filter this water. As we had already begun the process of rehabilitating our reservoir filtration plant, we are redesigning the unit to also incorporate the well supply. This will enable us to meet the latest Federal and New York State Regulations pertaining to both our alternate water supplies (Reservoirs and Wells) using a single filtration plant. We expect to resume using both the reservoirs and the wells in 2014, as they are currently out of service.

The City has an emergency interconnection to the Delaware Aqueduct (Shaft 22). This connection is located in Yonkers and water is distributed to the City of White Plains via the Kensico-Bronx Pipeline. This emergency connection can supply 100% of the City’s total requirements. During 2012 our system did not experience any restriction of our water source.

The New York State Department of Health (NYSDOH) has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. While nitrates (and other inorganic contaminants) were detected in our water, it should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk. See section “*Are there contaminants in our drinking water?*” for a list of the contaminants that have been detected, if any. The source water assessments provide resource managers with additional information for protecting source waters into the future.

Source Water Assessment for Reservoirs

The source water assessment on the Reservoir #1 found no noteworthy risks to source water quality. The source water assessment for Reservoir #2 contains no discrete PCSs and none of the land cover contaminant prevalence ratings were above the low. However, because microbial contaminants in reservoirs are generally highly mobile, this drinking water intake has a susceptibility rating of “medium-high” for protozoa and enteric bacteria and viruses.

Furthermore reservoirs are normally susceptible to water quality problems caused by phosphorous addition from surface water runoff of fertilizers and soaps, but our reservoirs have a substantial buffer distance from residential development.

Source Water Assessment for Dug Wells

The source water assessment for the groundwater sources has rated the dug wells as having a "medium-very high" susceptibility to microbials, protozoa, nitrites, nitrates, industrial solvents, metals, petroleum products, herbicides, pesticides and other industrial contaminants. These ratings are due primarily to the close proximity of permitted discharge facilities to the dug wells. This includes industrial/commercial facilities and the associated industrial activity in the assessment area. In addition, the wells draw from an unconfined aquifer of high hydraulic conductivity. While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State’s drinking water standards for microbial contamination.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting us.

The NYSDOH has evaluated the susceptibility of water supplies statewide to potential contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph(s) below. It is important to stress that these assessments were created using available information and only estimate the *potential* for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur. As your Public Water Supply (PWS), we provide treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

We obtain 100% of our raw water from the New York City water supply system drawn from the Kensico Reservoir. Before it enters the Kensico Reservoir, water either comes from the Catskill/Delaware watersheds east of the Hudson River and/or from the Croton watershed in Putnam and Westchester Counties.

The reservoirs in the Catskill/Delaware watersheds lie within a mountainous rural area. They are relatively deep with little development along their shorelines. The main water quality concerns associated with land cover is agriculture, which can contribute microbial contaminants, pesticides, and algae-producing nutrients. There are also some potential contamination concerns associated with residential lands and associated wastewater discharges. There are also a number of other discrete facilities, such as landfills, chemical bulk storage, etc., that have the potential to impact local water quality, but large significant water quality problems associated with these facilities are unlikely, due to the size of the watershed and surveillance and management practices.

The New York City Department of Environmental Protection (DEP) implements a series of programs to evaluate and protect source water quality within these watersheds. Their efforts focus on three important program areas:

- 1) The enforcement of strengthened watershed rules and regulations;
- 2) The acquisition and protection of watershed lands;
- 3) The implementation partnership programs that target specific sources of pollution in the watersheds.

Due to these intensive efforts, the SWAP methodologies applied to the rest of the state were not applied for this PWS. Additional information on the water quality and protection efforts in these New York City watersheds can be found at DEP's website www.nyc.gov/dep/watershed.

Treatment

All treatment of the water sources supplying the City of White Plains are treated in accordance with the requirements of the New York State Department of Health as follows:

Chlorination - Chlorine is added to ensure bacteriologically safe water.

Corrosion Control - Westchester County Water District No. 1 which supplies water to the City of White Plains constructed a corrosion control treatment facility to adjust pH and for the addition of ortho-phosphate. This treatment began operation in December 1995.

Fluoridation - Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for disease control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.7 to 1.2 mg/l (parts per million). The City of White Plains began fluoridation treatment of all water sources on October 1, 1972, as an additional public health measure. We recently received a commendation from the Westchester County Health Commissioner regarding our fluoridation program.

To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that we monitor fluoride levels on a daily basis. During 2012, monitoring showed fluoride at levels in the optimal range 99% of the time. None of the monitoring results showed fluoride at levels that approach 2.2 mg/l.

Filtration - Since August 5, 1999 The City of White Plains has utilized microfiltration for its surface water supply source consisting of two city-owned reservoirs (combined volume of just under 200,000,000 gallons.) As previously noted, our microfiltration plant is being reconstructed to meet the latest regulations and incorporate the wells into the system.

Facts and Figures

The public water supply system of the City of White Plains serves the entire city, an area of approximately 9.8 square miles. The City's residential population is approximately 57,000.

The water is distributed through approximately 160 miles of water mains to provide service to more than 10,000 metered accounts. The total water produced in year 2012 was 2,895 million gallons. The daily average of water treated and pumped into the distribution system is 7.91 million gallons per day. Our highest single day was 12.5 million gallons. The amount of water delivered to customers was 2,560 million gallons. This leaves an unmetered total of 335 million gallons, some of which is used to flush mains, fight fires, as well as losses from water main breaks, and water service line leaks before the meter.

The City has a progressive water structure wherein the unit rate escalates with increased usage. In 2012, water customers were charged at unit rates starting at \$1.60 per 100 cubic feet of water, and the average family of four (4) had an annual bill of \$182.00.

Are there contaminants in our drinking water?

As the State regulations require, we routinely test our drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Included as a supplement to this notice is a report of analytical testing results for contaminants required to be tested for by the United States Environmental Protection Agency and the New York State Department of Health. This supplement is available to consumers of the City of White Plains upon request.

It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Westchester County Health Department at 914-813-5000.

Table of Detected Contaminants							
Central Avenue Pumping Station Entry Point (CAPS)							
Inorganic Chemicals & Physical Characteristics							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum or	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
Chlorides	No	6/2012	6.36	mg/l	n/a	MCL 250	Naturally occurring or road salt
Manganese	No	6/2012	0.009	mg/l	n/a	MCL 0.3	Naturally occurring or road salt
Nitrate	No	6/2012	0.241	mg/l	n/a	MCL 10	Run-off from fertilizer used
Nitrite	No	6/2012	0.018	mg/l	n/a	MCL 10	Run-off from fertilizer used
Barium	No	6/2012	0.018	mg/l	n/a	MCL 2.00	Erosion of natural Deposits
Fluoride	No	5/2012	1.4	mg/l	n/a	MCL 2.2	Erosion of natural Deposits
Iron	No	6/2012	0.052	mg/l	n/a	MCL 0.3	Naturally occurring
Zinc	No	6/2012	0.04	mg/l	n/a	MCL 5.0	Naturally occurring
Sulfate	No	6/2012	3.84	mg/l	n/a	MCL 250	Naturally occurring
Nickel	No	6/2012	2	ug/l	n/a	n/a	Naturally occurring
Sodium	No	6/2012	7.74	mg/l	n/a	MCL 20	Naturally occurring
Turbidity	No	10/2012	2	ntu	n/a	MCL 5	Soil run-off
Orchard Street Pumping Station Entry Point (OSPS)							
Inorganic Chemicals & Physical Characteristics							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum or	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
Chlorides	No	6/2012	6.48	mg/l	n/a	MCL 250	Naturally occurring or road salt
Manganese	No	6/2012	0.009	mg/l	n/a	MCL 0.3	Naturally occurring or road salt
Nitrate	No	6/2012	0.181	mg/l	n/a	MCL 10	Run-off from fertilizer used
Nitrite	No	6/2012	0.032	mg/l	n/a	MCL 10	Run-off from fertilizer used
Barium	No	6/2012	0.018	mg/l	n/a	MCL 2.00	Erosion of natural Deposits
Fluoride	No	1/2012	1.2	mg/l	n/a	MCL 2.2	Erosion of natural Deposits
Iron	No	6/2012	0.052	ug/l	n/a	MCL 0.3	Naturally occurring
Zinc	No	6/2012	0.04	ug/l	n/a	MCL 5.0	Naturally occurring
Sulfate	No	6/2012	3.81	mg/l	n/a	MCL 250	Naturally occurring
Nickel	No	6/2012	2	ug/l	n/a	N/A	Naturally occurring
Sodium ⁽¹⁾	No	6/2012	7.68	mg/l	n/a	MCL 20	Naturally occurring or road salt
Turbidity	No	10/2012	2	ntu	n/a	MCL 5	Soil run-off
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum or	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
*Gross Alpha Particle	No	n/a 10/2004	3.92	pci/l	n/a	MCL 15	Decay of natural deposits & manmade emissions

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Gross Alpha, Beta Radium 226, Radium 228, and Uranium min

	Alpha	Beta	Radium 226	Radium 228	Uranium
6/7/2004	-0.4+/-0.6	2.7+/-1.6	-0.05+/-0.07	3.1+/-5.0	0.500+/-1.41
9/7/2004	0.4+/-0.7	0.3+/-1.5	(0.03)+/-0.04	(0.4)+/-0.90	50+/-1.4
10/25/2004	0.0+/-0.6	2.1+/-1.4	(0.08)+/-0.12	1.3+/-0.81	0.50+/-1.41

Contaminant	MCL
Combined Radium	5 pci/l
Uranium	30 pci/l

The state considers 50 pci/l to be the level of concern for Beta Particles

Distribution System							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg / Max Range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
Fluoride	No	12/29/12	1.2	mg/l	n/a	MCL 2.2	Treatment
Orthophosphate Treatment	No	8/4/12	>2.75	mg/l	n/a	n/a	n/a
Contaminants monitored under interim enhanced surface water treatment rule (Disinfection By-Products)							
Total Trihalomethanes (TTHM) ⁽²⁾	No	2012	33.28 OSPS 40.34 CAPS	ug/l	n/a	80	By-products of drinking water chlorination
Haloacetic Acids (HAA5) ⁽²⁾	No	2012	40.21 OSPS 48.65 CAPS	ug/l	n/a	60	By-products of drinking water chlorination

Distribution System							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum or Range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
Lead ⁽³⁾	No	6/11	2 (ND-5)	ug/l	n/a	AL 15.0 ug/l	Corrosion of household plumbing systems
Copper ⁽⁴⁾	No	6/11	358 (53-404)	ug/l	n/a	AL 1300 ug/l	Corrosion of household plumbing systems

Kensico Supply Entry Point							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum or Range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
Turbidity ⁽⁵⁾ (highest single monthly value)	No	10/2012	2.0	NTU	n/a	MCL=<1	Soil run off

As per State regulations, the City of White Plains routinely monitors your drinking water for various contaminants. Your water is tested for inorganic contaminants, nitrate, lead and copper, volatile organic contaminants, synthetic organic contaminants and total trihalomethanes. The contaminants detected in your drinking water are included in the Table of Detected Contaminants.

In addition, we monitored entry point samples for inorganic contaminants that were not detected. These include, cyanide, ammonia, iron, manganese, zinc, antimony, arsenic, beryllium, mercury, lead, copper, thallium, selenium, cadmium, chromium, silver. Organic contaminants that were tested for and not detected in the source water include 3-Hydroxycarbofuran, Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Carbaryl, Carbofuran, Methomyl, Oxamyl, Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Heptachlor Expoxide, Lindane, Methoxychlor, PCB's, Propachlor, Toxaphene, 2,3,7,8-TCDD (Dioxin), Diquat, Endothall, Glyphosate, 2,4,5,T, 2,4-D, Dalapon, Dicamba, Dinoseb, Pentachlorophenol, Picloram, Silvex, 1,2-Dibromo 3-chloropropane, , 1,2-Dibromoethane, Butachlor, Metolachlor, Metribuzin, Alachlor, Atrazine, Benzo(a)pyrene, bis(2-Ethylhexyl) adipate, bis(2-Ethylhexyl) phthalate, Hexachlorobenzene, Hexachloro-cyclopentadiene, Simazine, 1,1,1,2-tetrachloroethane, 1,1,1-trichloro-ethane, 1,1,2,2-trichloroethane, 1,1,2-trichloroethane, 1,1-dichloro-ethane, 1,1-dichloroethene, 1,1-dichloropropene, 1,2,3-trichloro-benzene, 1,2,3-trichloropropane, 1,2,4-trichlorobenzene, 1,2,4-tri-methylbenzene, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,2-dichloro-propane, 1,3,5-trimethylbenzene, 1,3-dichlorobenzene, 1,3-dichloro-propane, 1,4-dichlorobenzene, 2,2-dichloropropane, 2-butanone, 2-chlorotoluene, 4-chlorotoluene, Benzene, Bromobenzene, Bromochloromethane, Bromomethane, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, cis-1,2-dichloroethene, cis-1,2-dichloroethene, cis-1,3-dichloro-propene, Dibromomethane, Dichlorodifluoromethane, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, Methy iso-butyl ketone, Methyl tert-butyl ether Methylene Chloride, N-butylbenzene, N-propylbenzene, Naphthalene, O-Xylene, P & M-xylene, P-isopropyltoluene, SEC-butylbenzene, Styrene, TERT-butylbenzene, Tetrachloroethene, Toluene, trans-1,2-dichloroethene, trans-1,3-dichloropropene, Trichloroethene, Trichlorofluoromethane, and Vinyl chloride. Radiological contaminants tested for and not detected in the source water include Strontium-90, and tritium. Unregulated Contaminants that were tested for and not found in the source water are Perchlorate, DCPA di-acid, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 4,4-DDE, Acetochlor, EPTC, Molinate, Terbacil, and Nitrobenzene.

The results of the lead and copper testing performed fell below the action level threshold. Therefore, additional lead and copper testing is not required until June 2014.

Notes:

- (1) Sodium: Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.
- (2) This level represents the annual quarterly average calculated from data collected
- (3) The level presented represents the 90th percentile of the 30 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead values detected in your water system. The lead values ranged from < 2.0 ug/l to 5.0 ug/l. The 90th percentile was the 27th highest value (2.0 ug/l); 30 samples passed with ZERO (0) failure. Lead results greater than 15 ug/l = "Fail".
- (4) The level presented represents 90th percentile of the 30 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90[%] of the copper values detected in your water system. The action level for copper was not exceeded at any of the 30 sites tested. The copper values ranged from 53.0 ug/l to 404.0 ug/l. The 90th percentile was **the 27th highest value** (358 ug/l); all samples passed. Copper results greater than 1300 ug/l = " Fail".
- (5) Turbidity is a measure of the cloudiness of the water. Our highest single turbidity measurement for the year occurred on **October, 2012** (2 NTU). State regulations require that turbidity must always be below 5 NTU.

DEFINITIONS:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - pph).

Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion - ppg).

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

Millirems per year (mrem/yr): A measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

Not Applicable: (n/a)

What Does This Information Mean?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State Requirements. Although the action level for lead was not exceeded, we are required to present the following information on lead in drinking water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. White Plains is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available for the Safe Drinking Water Hotline (1-800-426-4791) or at

<http://www.epa.gov/safewater/lead>.

Is our water system meeting other rules that govern operations?

During 2012, our system was in compliance with all applicable State drinking water operating, monitoring, and reporting requirements.

Variances, Exemptions, Administrative or Judicial Orders:

The Surface Water Treatment Rule (SWTR) required that all water suppliers drawing water from a surface water source provide filtration by June 29, 1993. After implementing a Watershed Protection Plan, the City of New York has been granted Filtration Avoidance. Early in 1997 the City of New York was granted a long term exemption from the filtration requirement by the U.S. environmental Protection Agency and the New York State Department of Health for the Catskill source south of Kensico and the Delaware source. The City was granted this exemption based on the exceptional quality of the raw water and the continued demonstration that the City can protect the water at its source. The SWTR requires that treatment for unfiltered surface water sources must achieve at least a 99.9 percent inactivation of *Giardia Lamblia* cysts and 99.99% inactivation of enteric viruses. In 1994, The City of White Plains completed the installation of improvements required to achieve the required contact time.

The City of White Plains was granted a Biofilm variance from the New York State Department of Health on May 26, 1994. The variance recognizes that the maximum contaminant level cannot be used to determine the public health significance of coliform bacteria being detected in the distribution system when biofilms, and not contaminated water, is in the system.

Information on Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water and ground water under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause Cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. In 2012, the City of New York Department of Environmental Protection (which sells us 100% of our raw water) collected 34 routine samples at their Kensico Reservoir effluents and analyzed them for Cryptosporidium oocysts using Method 1623HV. Of the 34 routine samples, they report that **one** was positive for Cryptosporidium (0 to 3 oocysts/50L).

Information on Giardia

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. The source water is disinfected prior to reaching our distribution system to remove/inactivate the Giardia cyst. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Giardia may cause giardiasis, an intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be tested with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where hand- washing practices are poor. In 2012, the City of New York Department of Environmental Protection (which sells us 100% of our raw water) collected 34 routine samples at Kensico Reservoir effluents and analyzed them for Giardia using Method 1623HV. Of the 34 routine samples, they report that 31 were positive for Giardia (0 to 6 cysts/50L).

Do I Need to Take Special Precautions?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, *Giardia* and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

Why Save Water and How to Avoid Wasting It?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
 - Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
 - Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.
- You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:
- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
 - Turn off the tap when brushing your teeth.
 - Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
 - Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
 - Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes, if it moved, you have a leak.

System Improvements

In 2012, we completed the following:

- 1 Installed new valves and hydrants various locations citywide.
- 2 Continued with Annual Leak Survey citywide.
- 3 Installed security fencing along city owned watershed property.
- 4 Completed our annual Hydrant Flushing and Valve Maintenance Program Citywide.

In 2013, we are planning the following capital improvements:

- 1 Start Phase 2 Transmission Main 30" Ductile Iron Ferris Ave.
- 2 Reservoir Nos. 1 and 2 spillway improvements.
- 3 Upgrade various pumps at the Orchard Street Pumping Station.
- 4 Replacement of Filter Media for Micro Filtration Plant.
- 5 Begin to install New Chemical Tanks at the Orchard Street Pump Station.
- 6 Receive DOH authorization to proceed with two (2) new Wells at the Orchard Street Pump Station.
- 7 Upgrade watershed security.
- 8 Replace large diameter valves various locations.
- 9 Replace/reconstruct miscellaneous water lines throughout the City.
- 10 Design of new, larger, water storage tanks.

Closing

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community and our way of life. Please call our office if you have questions.

City of White Plains
Department of Public Works
255 Main Street, 3rd Floor
White Plains, NY 10601

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